

Work Order ID 61683 -1

Tuesday, August 31, 2010 11:48:16 AM



Page 1

Item ID: D2360

Revision ID:

Item Name: Litter Tie Down Assembly

Start Date: 8/31/2010 Start Qty: 4.00

Required Date: 9/7/2010 Req'd Qty: 4.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals: Process Plan:

Date: 10-8-31

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2360

Rev D

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: 12.65" Long

SL 10/11/22



110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Machine as per Folio D2341 and Dwg D2341
2-Deburr

SL 10/2/22



120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

SL 10/2/22

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61683

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Page 2

Item ID: D2360

Accept



Setup Start



Revision ID:

Stop



Item Name: Litter Tie Down Assembly

Start Date: 8/31/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 9/7/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

ant 10/12/22

6

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

6 BR 10-12-22.

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

MUS 951.
START TIME: *8:05*
OVEN TEMPERATURE: *320°*
FINISH TIME: *8:35*

6 10-12-23.

W/O:		WORK ORDER CHANGES					
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Page 3

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Accept



Setup Start



Revision ID:

Stop



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Start Date: 8/31/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 9/7/2010 Req'd Qty: 4.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC3- Inspect Part Finish

0.00

⇒ HU 10/12/23

6

0



QC

Memo

0.00

Quality Control

170

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

Assemble as per dwg D2360

4510/01/06 (3)

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Sulaka

(+3)

W/O:		WORK ORDER CHANGES					
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Page 4

Item ID: D2360

Accept



Setup Start



Revision ID:

Stop



Item Name: Litter Tie Down Assembly

Start Date: 8/31/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 9/7/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Identify as per dwg & Stock Location: 224

0.00



Packaging

Memo

0.00

Packaging

11/1/10 30

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

OK 11/1/10MR
11-01-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Picklist Print

Tuesday, August 31, 2010 11:48:21 AM

Page 1

Work Order ID: 61683

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly



Start Date: 8/31/2010

Required Date: 9/7/2010

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP rev H 07.06.12 ecn 825 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D6201		Manufactured	No			100	f	22.3468	1.054	4.437895			
-------	--	--------------	----	--	--	-----	---	---------	-------	----------	--	--	--



"T" Extrusion

Location

Loc Qty

Loc Code

MAT05

22.34684

56424

6.61

57767

15.73684

4.5

AN526C1032R18

Purchased

No

170

Each

589.0000

1

4



Screw

Location

Loc Qty

Loc Code

ST328

589

101458

65

108079

419

4523

105

6

AN960JD10

NAS1149D0363J

Purchased

No

170

Each

6.0000

2

8



Washer

LD M115622

(12X)

Location

Loc Qty

Loc Code

ST

6

107715

6

AN960JD10L

NAS1149D0332J

Purchased

No

170

Each

2,479.000

8

32



Washer

LD M116441

(45X)

Location

Loc Qty

Loc Code

ST348

2479

110985

2479

8/31/01/06

8/31/01/06

8/31/01/06

4

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 2

Work Order ID: 61683

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Start Date: 8/31/2010

Required Date: 9/7/2010

Start Qty: 4.00

Required Qty: 4.00

D2002-015



Knob

Manufactured No

170 Each

47.0000

2

8



EP 8/11/01/06

Location

Loc Qty

Loc Code

ST003

47

16177

47

12

D2345



Lock Channel

Manufactured No

170 Each

9.0000

1

4



EP 8/11/01/06

Location

Loc Qty

Loc Code

ST011

9

57762

9

6

D2366



Lock Handle

Manufactured No

170 Each

6.0000

2

8



EP 8/11/01/06

Location

Loc Qty

Loc Code

ST012

6

57763

6

6

D2367



Handle Knob

Manufactured No

170 Each

7.0000

1

4



EP 8/11/01/06

Location

Loc Qty

Loc Code

ST012

7

57764

7

6

D2372



Quick Release

Manufactured No

170 Each

29.0000

2

8



EP 8/11/01/06

Location

Loc Qty

Loc Code

ST012

29

57765

2

60716

27

B64755

Tuesday, August 31, 2010 11:48:21 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

Tuesday, August 31, 2010 11:48:21 AM

Page 3

Work Order ID: 61683

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Start Date: 8/31/2010

Required Date: 9/7/2010

Start Qty: 4.00

Required Qty: 4.00

D2373



Spring

Manufactured No

170 Each

7.0000

1



Location

Loc Qty

Loc Code

ST012

7

42920

7

170 Each

6.0000

1



Location

Loc Qty

Loc Code

ST014

6

57766

3

60154

1

61342

2

170 Each

10,620.00

1



Location

Loc Qty

Loc Code

ST319

10620

111477

8332

15541

2288

170 Each

2,115.000

3



Location

Loc Qty

Loc Code

ST300

2115

114523

115

114784

2000

MS20470AD3-4



Rivet, Universal Head

Purchased No

MS21042L3



Nut

Purchased No

4
EPB11/01/06

6
EPB11/01/06
B64754 (4x)

6
EPB11/01/06
B64089 (2x)

6
EPB11/01/06
M115835 (18x)

Tuesday, August 31, 2010 11:48:21 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Tuesday, August 31, 2010 11:48:21 AM

Page 4

Work Order ID: 61683

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Start Date: 8/31/2010

Required Date: 9/7/2010

Start Qty: 4.00

Required Qty: 4.00

MS27039-1-13 Purchased

No

170

Each

58.0000

1

4



Screw

Location

Loc Qty

Loc Code

ST292

58

110844

58

MS27039-1-15 Purchased

No

170

Each

85.0000

2

8



Screw

Location

Loc Qty

Loc Code

ST292

85

114056

2

114718

83

NAS679A3W Purchased

No

170

Each

225.0000

1

4



Nut

Location

Loc Qty

Loc Code

ST280

225

1463

32

2409

193

ES 11/01/06

ES 11/01/06

11/16/08 (12x)

ES 11/01/06

6

Tuesday, August 31, 2010 11:48:21 AM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED HA	DRAWING NO. D2360	REV. D SHEET 1 OF 2
DATE 07.06.06		TITLE LITTER TIE DOWN ASSEMBLY (LOCKING) NTS	
A	95.02.10	NEW ISSUE	
B	95.02.20	RE-DESIGN	
C	97.08.27	ADD MS20470AD3-4 RIVET	
D	07.06.06	D2002-015 WAS D2376; SECTION B-B QTY(2) AN960JD10 WAS QTY(3) QTY(8) AN960JD10L WAS QTY(5)	

RELEASED

07 06 07

PARTS LIST:

QTY	PART NUMBER	DESCRIPTION
X	D2360	LITTER TIE DOWN ASSEMBLY (LOCKING)
1	D2341	LITTER TIE DOWN (LOCKING)
1	D2345	LOCK CHANNEL
2	D2366	LOCK HANDLE
1	D2367	KNOB (DELRIN)
2	D2372	QUICK RELEASE FASTENERS
1	D2373	SPRING
2	D2002-015	KNOB (DELRIN)
1	D2444	PIP PIN
1	AN526C1032R18	SCREW
2	AN960JD10	WASHER
8	AN960JD10L	WASHER
1	MS20470AD3-4	RIVET
3	MS21042L3	NUT (OR MS21042-3)
1	MS27039-1-13	SCREW
2	MS27039-1-15	SCREW
1	NAS679A3W	NUT



SHOP COPY
RETURN TO:
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 6683
BS10-8-3

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

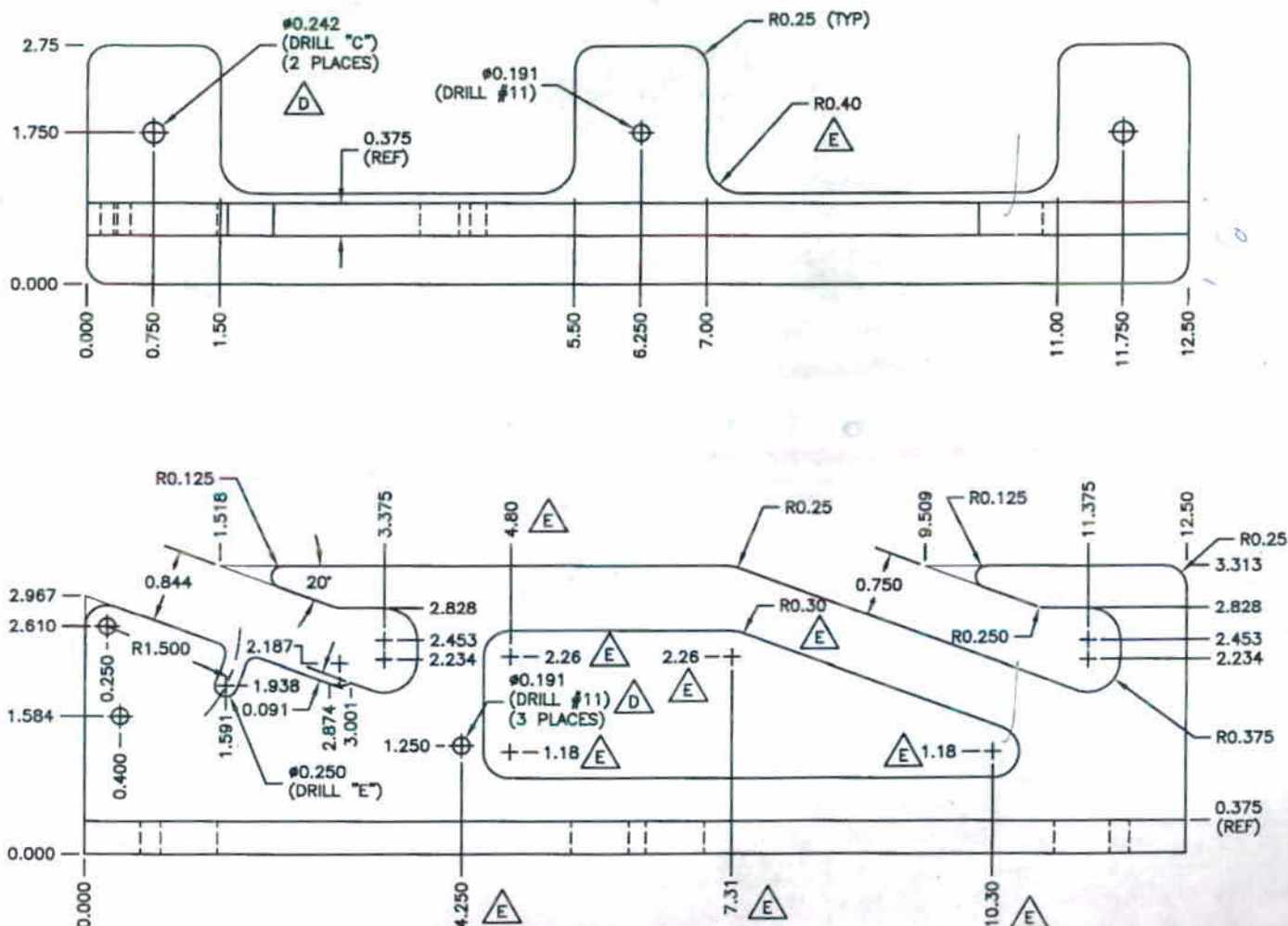
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN BW	DRAWN BY JC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED B	APPROVED JH	DRAWING NO. D2341	REV. F SHEET 1 OF 1
DATE 07.06.07		TITLE LITTER TIE DOWN BRACKET (LOCKING)	SCALE 1:2
A	95.01.13	NEW ISSUE	
B	95.02.14	MODIFIED LOCK	
D	95.02.20	CHANGES TO DIAMETERS	
E	97.10.01	CHANGES FOR MACHINING	
F	07.06.07	REVISED NOTES; FINISH WAS ANODIZE	

**D2341 LITTER TIE DOWN BRACKET (LOCKING)**

- 1) MATERIAL: MAKE FROM D6201-0125 EXTRUSION
(6061-T6/T651 PER QQ-A-200/8)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (REF. 4.3.5.1) PER QSI 005 4.3
- 3) BREAK ALL SHARP EDGES TO 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N "D2341" USING FINE POINT
PERMANENT INK MARKER

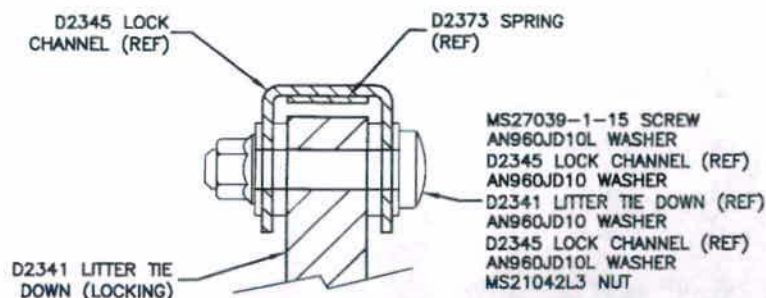
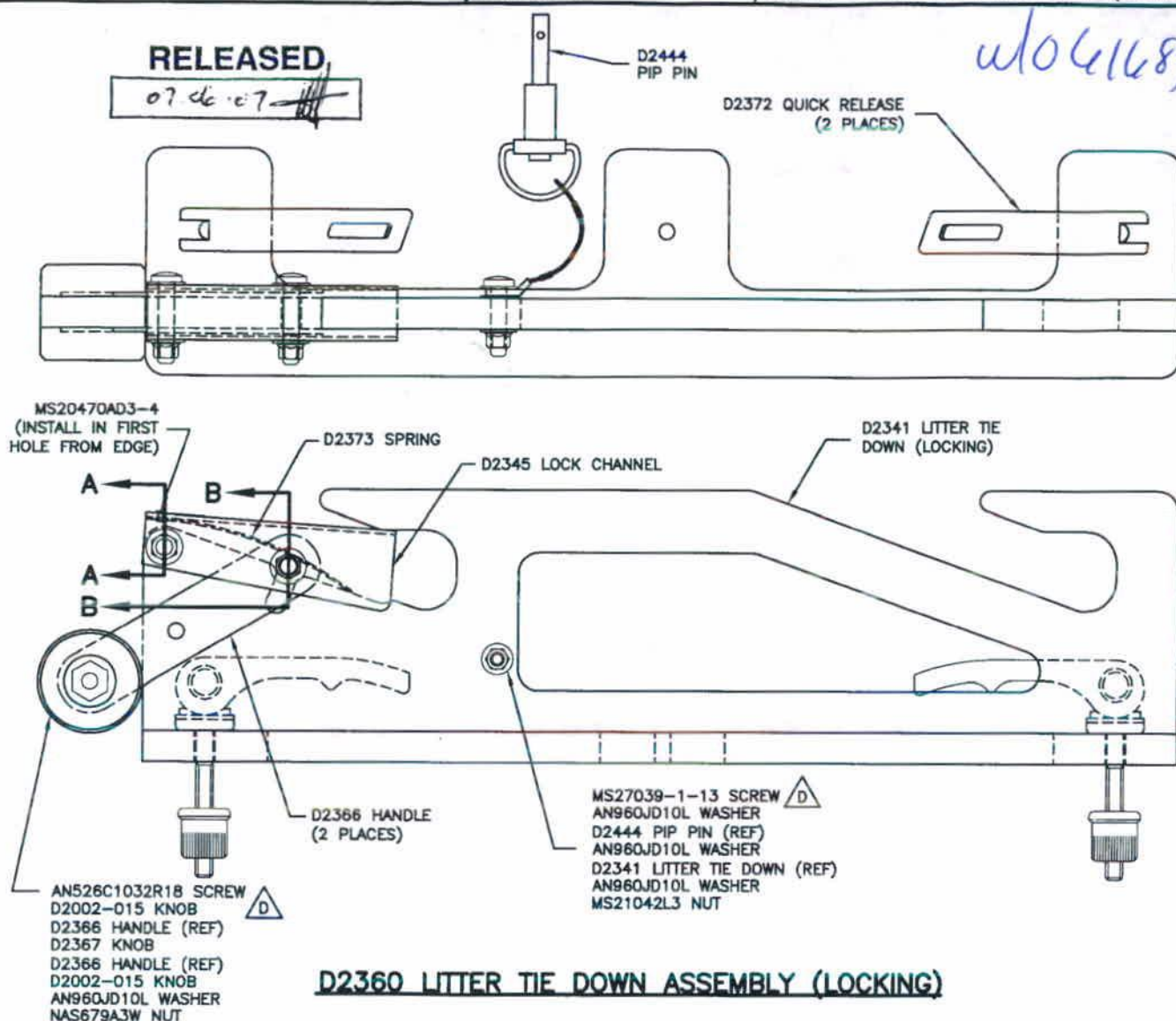
**RELEASED**

07.6.22

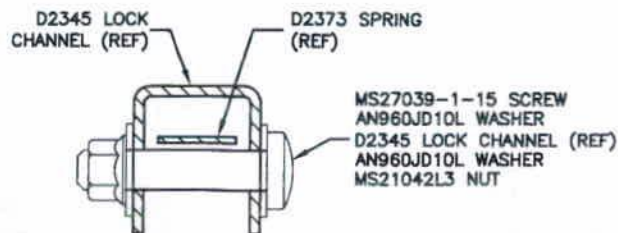
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DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED [Signature]	DRAWING NO. D2360	REV. D SHEET 2 OF 2
DATE 07.06.06		TITLE LITTER TIE DOWN ASSEMBLY (LOCKING) NTS	



SECTION A-A
(SCALE 1:1)



SECTION B-B
(SCALE 1:1) 

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 61683
Description: Litter Tie Down Bracket (Locking)		Part Number: D2341
Inspection Dwg: D2341	Rev: F	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article** ☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.750	+/-0.010	1.750	✓		Vern. JL-3	
2.75	+/-0.030	2.753	✓		"	
Ø0.242	+0.005/-0.001	.244	✓		"	
Ø0.191	+0.005/-0.001	.193	✓		"	
R0.25	+/-0.030	.25	✓		R-G	
R0.40	+/-0.030	.40	✓		"	
12.50	+/-0.030	12.505	✓		H-G	
11.750	+/-0.010	11.752	✓		Vern CNC-02	
11.00	+/-0.030	11.001	✓		H-G	
7.00	+/-0.030	7.003	✓		H-G	
6.250	+/-0.010	6.251	✓		Vern CNC-02	
5.50	+/-0.030	5.497	✓		H-G	
1.50	+/-0.030	1.503	✓		Vern. JL-3	
0.750	+/-0.010	.751	✓			
0.400	+/-0.010	.400	✓			
1.584	+/-0.010	1.586	✓			
2.610	+/-0.010	2.611	✓			
0.250	+/-0.010	.251	✓			
0.844	+/-0.010	.843	✓			
Ø0.250	+/-0.010	.250	✓			
0.750	+/-0.010	.750	✓			
3.313	+/-0.010	3.314	✓			
4.250	+/-0.010	4.250	✓			
1.250	+/-0.010	1.252	✓			

Measured by: JL	Audited by: [Signature]	Prototype Approval: N/A
Date: 10/12/22	Date: 10/12/22	Date: N/A

Rev	Date	Change	Revised by	Approved
A	06.05.24	New Issue P/O D2360	KJ/JLM	
B	07.07.17	Dwg Rev. updated	KJ/JLM	
C	10.02.02	Dimensions updated	KJ	[Signature]